

TITLE OF THE INVENTION

ELEVATOR SYSTEM WITH ONE OR MORE ELEVATOR CARS MOVING  
INDEPENDENTLY IN A SAME SHAFT

5      CROSS REFERENCE TO RELATED APPLICATION

This application is a Continuation of co-pending PCT  
International Application No. PCT/FI02/00816 filed on Octo-  
ber 21, 2002, which designated the United States, and on  
which priority is claimed under 35 U.S.C. § 120, the entire  
10 contents of which are hereby incorporated by reference.

BACKGROUND OF THE INVENTION

Field of the Invention

The present invention relates to an elevator system es-  
15 pecially for high-rise multi-floor buildings where a passen-  
ger who wants to get to a floor in the top part has to change  
to an elevator that mainly serves the topmost floors only.

In very tall buildings, it is generally economically not  
20 possible to provide elevator shafts extending through the  
entire height of the building from the bottom floor to the  
top floor so that each elevator could serve all floors. For  
this reason, elevators are traditionally divided into differ-  
ent zones in the vertical direction, of which the lowest zone  
25 extends from the entrance floor, hereinafter called ground  
floor, to a floor at a given height, this zone being called  
low-rise zone, while the highest zone, called high-rise zone,  
extends from a given transfer floor, a so-called sky lobby  
floor to the topmost floors of the building. Between these  
30 zones, depending on the height of the building, there may be  
one or more intermediate zones, so-called mid-rise zones  
serving intermediate floors in the building from their re-  
spective transfer floors. The problem is generally that each  
zone is served by only one elevator in one elevator shaft, so  
35 it is necessary to provide for each zone and each elevator  
car a separate shaft extending from the ground floor of the